

rewritten in order to positively recite the external layer as an element.

With respect to the rejection of the claims under 35 U.S.C. §§ 102 and 103, the rejection is traversed for the reasons set forth below.

The invention is directed to a hose which resists the torsional effect caused by fluid flowing under pressure therein. Claim 3 as rewritten, is directed to a hose which has an inner layer and a chain-type mesh-network having a tubular shape with mesh lines and mesh rows formed in a single layer wound on the external surface of the inner layer, and wherein the mesh rows and mesh lines are slanted in opposite directions relative to the longitudinal axis of the hose to substantially eliminate torsional effects resulting from pressure changes in the hose. It is submitted that neither of the references cited by the Examiner deal with or effectively resolve the problem solved by the invention.

For example, Newberry et al. discloses a safety hose wherein the knit reinforcement is formed of two yarns wound helically with respect to the tube. One yarn is tensioned with respect to the other and provides means for breaking and permitting elongation of the hose without rupture. Newberry et al. is essentially directed to a hose which provides for a controlled or guided rupture.

Cook discloses a reinforced article having memory characteristics provided with reinforcing means, including knitted strands. The drawing (Fig. 2) shows and the specification at column 4, lines 9-27, describes a double layer of knitted

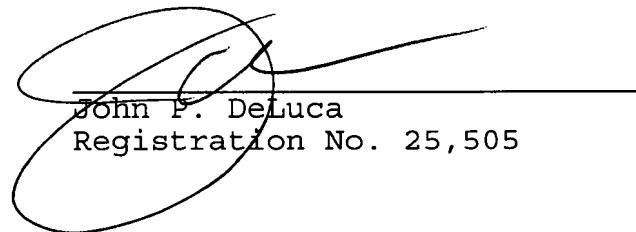
reinforcing material to prevent twisting of the article. The present invention eliminates torsional effects caused by pressure changes by means of a single layer or mesh-network. This is different from the twisting probes of Cook. Further, Cook requires a second layer, whereas the present invention does not. This is not to say that a second layer could not be used if desired.

The present invention substantially eliminates the torsion effects that occur in knitted hoses when the pressure increases. The torsion effect is absent in the hose of the present invention, because the yarn has mesh lines and mesh rows crossed together in such a way that the lines in the rows have substantially the same but opposite inclination with respect to the longitudinal axis of the hose. The references do not provide such an arrangement.

The remaining claims are directed to other features of the invention relative to the arrangement of mesh lines and mesh rows, the relative strength of the mesh lines and mesh rows and the various types of mesh-networks which may be employed.

In view of the foregoing, it is therefore respectfully requested that the Examiner reconsider his rejection of the claims, the allowance of which is earnestly solicited.

Respectfully submitted,



John P. DeLuca  
Registration No. 25,505

WATSON, COLE, GRINDLE & WATSON  
1400 K Street, N.W.  
Washington, D.C. 20005-2477  
(202) 628-0088